Rhodora

JOURNAL OF THE

NEW ENGLAND BOTANICAL CLUB

Conducted and published for the Club, by

BENJAMIN LINCOLN ROBINSON Editor-in-Chief.

MERRITT LYNDON FERNALD, HOLLIS WEBSTER } Associate Editors.

WILLIAM PENN RICH, EDWARD LOTHROP RAND } Publication Committee.

Vol. 25. March, 1923. No. 291.

CONTENTS:

Dumontia filiformis on the New England Coast. *W. A. Setchell* .. 33
Reports on the Flora of the Boston District—XXXIX 37
The estuarine Bidens of the Miramichi. *M. L. Fernald* 43
Habenaria hyperborea in Rhode Island. *A. E. Lownes* 44
A new Station for Daphne. *H. A. Nye* 45
Cladonia Beaumontii in Massachusetts. *C. A. Robbins* 46
Oenothera perennis var. rectipilis comb. nov. *S. F. Blake* 47
Another Orchid new to New England. *M. L. Fernald* 47

Boston, Mass. 300 Massachusetts Ave. | Providence, R. I. Preston and Rounds Co.

RHODORA.—A monthly journal of botany, devoted primarily to the flora of New England. Price, $2.00 per year, postpaid, domestic and foreign); single copies (if available) 20 cents. Volumes 1-8 or single numbers from them can be supplied at somewhat advanced prices which will be furnished on application. Notes and short scientific papers, relating directly or indirectly to the plants of the northeastern states, will be gladly received and published to the extent that the limited space of the journal permits. Forms will be closed five weeks in advance of publication. Authors (of more than one page of print) will receive 25 copies of the issue in which their contributions appear. Extracted reprints, if ordered in advance, will be furnished at cost.

Address manuscripts and proofs to
B. L. ROBINSON, 3 Clement Circle, Cambridge, Mass.

Subscriptions, advertisements, and business communications to
W. P. RICH, 300 Massachusetts Avenue, Boston, Mass.

Entered at Boston, Mass., Post Office as Second Class Mail Matter.

Rhodora

JOURNAL OF

THE NEW ENGLAND BOTANICAL CLUB

Vol. 25. March, 1923. No. 290.

DUMONTIA FILIFORMIS ON THE NEW ENGLAND COAST.

William Albert Setchell.

In the years 1920 and 1921, Mrs. Setchell and myself attempted to determine something of the algal flora in the vicinity of Newport, Rhode Island, as regards its seasonal periodicity. Collections were planned for each month of the year, but, for reasons of inclement weather coincident with times of extreme low tide intervals, they could not be carried out with the regularity desired. We selected a locality along the outer Beach Road, about half-way between Graves Point and Prices Neck (cf. U. S. C. & G. S., chart No. 353, issue of Mar., 1918). Two jutting points enclosing a small rocky and pebbly beach, at the very roadside, offer here an exceptionally good and convenient collecting place, directly exposed to the waters of the Atlantic Ocean. On the easterly rocky point, composed of a flakey, micaceous schist, the different belts of the littoral region were well represented and, being provided with numerous small, shallow tide-pools, afforded excellent habitats for many small species, especially during the spring and early summer months. Our collections covered the months from March to September, with the exception of August, when inclement weather at the times of favorable low tides interrupted the sequence.

At this locality, the extreme maximum temperature of the ocean waters seldom, if ever, exceeds 20° C., although that of the shallow tide-pools may exceed 30° C. for short intervals of time. The summer

algal flora of the sublittoral belt, therefore, is largely of the type of the northern New England coast in summer and its winter and spring flora may even include spring or summer species normal to Labrador and Greenland coasts. The plants of the tide-pools are numerous in spring and even in early summer, but are few in middle and late summer, since the temperature of the water rises to that typical of the waters of Long Island Sound and those to the south without affording other physical conditions adapted to the growth of species of those regions. The tide-pool algal flora of summer, therefore, consists only of a few perennial species which can endure such higher temperatures in a state of quiescence. It is my intention to publish some detailed notes as to these relations when the collections have been more completely worked over.

One of the interesting and important finds of our collecting was *Dumontia filiformis* (Huds.) Grev., a species, until comparatively recently, unknown from the Atlantic Coast of North America. At Newport it grows in the shallow tide-pools, often filling them completely, and occurs from the latter part of March until the earlier portion of July. By the last week in March the plants were well formed, but no organs of reproduction were found. Presumably these plants were all gametophytes. About the middle of April plants were found with antheridia and young procarpic branches. About the middle of May plants with mature cystocarps were common as were also those with well formed but undivided tetrasporangia. About the middle of June only tetrasporic plants were found and these lasted until the middle of July in 1920, although mostly old and becoming disorganized. In 1921, however, on July 6, no plants were to be seen in the tide-pools, but there had been heavy rains for several days previously, which may have hastened their disappearance.

Dumontia filiformis was first detected on the Atlantic Coast of North America at South Harpswell, Maine, by Grace A. Dunn, in June, 1913, and was collected by Roland Thaxter at Kittery Point, Maine, in the spring months of 1914. Plants collected by Thaxter in May, 1914, were distributed in the Phycotheca Boreali-Americana (Fasc. xliii, No. 2149) in April, 1916. In two copies examined these plants show young (undivided) tetrasporangia. Dunn has presented accounts of the vegetative structure and reproduction of the South Harpswell plants in two papers (Plant World, vol. 19, pp. 271–281, figs. 2, 1916, and Bot. Gaz., vol. 63, pp. 425–467, pl. 19–22, and text fig. 1–7, 1917).

The appearance of this plant, long sought for, on the eastern coast of North America, in such abundance at two localities on the Maine coast suggests, as Dunn has indicated (1917, pp. 425 and 459), that it is a recent introduction. The vicinity of the Harpswell Laboratory had been carefully explored in the early part of July by Frank S. Collins for six seasons (viz., 1902–1905 and 1908–1909) without Dumontia having been detected. Dunn, consequently, suggests that it had become established somewhere between 1909 and 1913. The discovery of *Dumontia filiformis*, well established, on a portion of the New England coast so remote from the Maine coast as Newport, R. I., seems to indicate that it has been much longer in residence on the New England coast, but has been overlooked. In its July state it resembles closely passé plants of *Halosaccion ramentaceum* (L.) Ag., and may have been passed over even by such an experienced collector as Collins as unworthy of closer examination.

Dumontia filiformis, formerly credited with a wide distribution, occurs on the Atlantic coasts of Europe, on the northeast and northwest coasts of North America, and on the northeast coast of Asia. Cotton (Journ. Linn. Soc., Bot., vol. 43, p. 202) has examined the specimens from the Falkland Islands and from the New Zealand region which have been credited to *Dumontia filiformis* and finds that they are all different, even generically. As he says (loc. cit.),—"There is now no evidence that *Dumontia filiformis* occurs at all in the Southern Hemisphere."

On the Atlantic coast of Europe *Dumontia filiformis* ranges from the region of the English Channel to the northern coasts of Norway and thence east to the Murman Sea, but in more northern waters is only occasional and inhabits sheltered localities. Since it grows in shallow tide-pools, the water surrounding it is commonly raised in temperature by insolation. It occurs on the southwest coast of Iceland. It is still a question as to whether it is to be classed as an inhabitant of the west shore of Greenland. The specific identity of the plant of Bering Sea has been called into question by Kjellman (Om Beringh afvets Algflora, p. 30, 1889), but the relationship is very close, if not identical, with *Dumontia filiformis*. The plant of the Kurile Islands, Asia, is similar to that of the Bering Sea coasts of North America.

Since there has seemingly been confusion between *Dumontia filiformis* (Huds.) Grev. and *Halosaccion ramentaceum* (L.) Ag. (cf.

Rosenvinge, Grønlands Havalger, p. 786, 1893), this tendency to confuse the two plants while collecting may explain the unnoted presence of the former species on the coast of New England previous to 1913. The discovery at Newport, R. I., may further indicate that additional localities, both north and south, remain to be discovered. The seasonal behavior indicates the temperatures of 10° C. to 20° C. as those critical for the fruiting of this species, covering both the production of cystocarps and of tetrasporangia and suggesting that 10° C. to 15° C. may be the temperatures favorable for cystocarpic reproduction (gametophyte) and 15° to 20° C. for tetrasporic reproduction (sporophyte).

It is to be noted that *Dumontia filiformis* is credited with possessing a prostrate perennial basal portion (cf. Reinke, Algenfl. westl. Ostsee, p. 204, 1889, and Brebner, Journ. Linn. Soc., vol. 30, pp. 436–443, pl. 35, 36, 1895). Dunn neither makes mention of this in the New England plant nor reference to the various accounts of its significance, persistence, and special structure, although her figures (loc. cit., pl. 19, figs. 8, 9) of the holdfast indicate that her plants possessed a basal portion of more complicated structure than that of an ordinary discoid holdfast. My own specimens show something of this prostrate thallus, but it is desirable that our New England plants be studied more in detail in this respect.

Brebner (loc. cit.) and Oltmanns (Morph. u. Biol. d. Algen, I, p. 573, fig. 356 a, 1904) have given a different interpretation to the structure of the apical meristem of the European plant from that of the American plant as indicated briefly by Dunn (loc. cit., p. 436), but her figure (pl. 19, fig. 11), although taken in all probability from a fairly mature branch, is more consistent with what is indicated for the European *Dumontia filiformis* than the type of apical meristem represented by *Furcellaria fastigiata* (cf. Oltmanns, loc. cit., p. 545, fig. 329).

The points as to identity in structure and development of the plants ascribed to *Dumontia filiformis* of the Atlantic Coast of Europe and North America are not completely settled as yet as I have shown by indicating our lack of knowledge as to details of agreement or difference in connection with the prostrate thallus and the apical meristem. As to the specific identity of the plants of the North Pacific with those of the North Atlantic, the question has been raised by Kjellman (loc. cit.), as indicated previously. There seem possibly

to be differences in details of vegetative structure and in the size of carpospores and tetraspores between the two sets of plants, but examination of a large series of specimens is required to make this certain. This question must remain to be settled in the future.

University of California.

REPORTS ON THE FLORA OF THE BOSTON DISTRICT,—XXXIX.

LABIATAE.

AGASTACHE.

A. scrophulariaefolia (Willd.) Ktze. Rich woods, Oak Island, Revere (*Wm. Boott*, Aug. 16, 1861; other collectors down to 1908). A rare plant of rich woods, occasional in Berkshire county and Connecticut; this station probably now extinct.

AJUGA.

A. reptans L. Escaped on bank, Cambridge (*W. Deane*, June 6, 1910); spontaneous under shrubs in garden, S. Hanover (*Mrs. E. A. Josselyn*, June 17, 1904); reported from moist meadow in N. Easton by C. Blomberg in Rhodora, iv. 14, 1903.

BALLOTA.

B. nigra L. Dump, Cambridge (*W. Deane*, Oct. 10, 1885); Hull (*C. E. Perkins*, July 15, 1881); also Chelsea and E. Boston, no data.

[*Blephilia ciliata* Raf. is reported by Dr. Thomas Morong from Ashland, in Dame & Collins, Fl. Middlesex Co., 72, 1888. As this is the only record for this plant in Massachusetts from east of the Connecticut Valley, it is probably a casual introduction, and not a native plant at Ashland.]

COLLINSONIA.

C. canadensis L. Rich woods, rare; Oak Island, Revere, Ipswich, Georgetown, Haverhill, Dracut.

DRACOCEPHALUM.

D. parviflorum Nutt. Waste places, rare; W. Cambridge (*A. S. Pease*, July 4, 1908); Needham (*T. O. Fuller*, July 10, 1899); S. Hanover (*Mrs. E. A. Josselyn*, June 16, 1899).

D. THYMIFLORUM L. See RHODORA, xiii. 212, 1911. Woolwaste dumping ground, Westford (*Miss E. A. Fletcher*, June 27, 1911). Specimen in herb. Bos. Soc. Nat. Hist. A waif from Northern Europe and Siberia.

GALEOPSIS.

G. LADANUM L. Dry sandy ridge above beach at Point of Pines, Revere, also at edge of Oak Island (*Wm. Boott*, September, 1851; other collectors to 1911). Probably extinct, as the area is now largely covered by houses.

G. TETRAHIT L. Waste places, apparently rare; Ipswich, Manchester, Gloucester, Essex, Dedham, Sherborn.

G. TETRAHIT L., var. BIFIDA (Boenn.) Lejeune & Courtois. See RHODORA, xii. 141–2, 1910. Waste places in moist soil, common.

HEDEOMA.

H. HISPIDA Pursh. Garden weed, Reading (*W. H. Manning*, July 6, 1887). Specimen in herb. N. E. Botanical Club.

H. pulegioides (L.) Pers. Dry ledges and pastures, common.

HYSSOPUS.

H. OFFICINALIS L. Roadside near farm, Burlington (*T. O. Fuller*, Aug. 20, 1893; other collectors till 1899); escape, Georgetown (*Mrs. C. N. S. Horner*, August, 1877).

LAMIUM.

L. ALBUM L. Escaped from gardens at Salem, Saugus, Cambridge and Milton.

L. AMPLEXICAULE L. Weed in gardens and grassland, frequent. A plant with cleistogamous flowers was found in Cambridge, Oct. 23, 1908, by Prof. M. L. Fernald.

L. HYBRIDUM Vill. See RHODORA, xi. 55, 1909. Abundant in cultivated ground and grassy border, Hingham (*C. J. Sprague*, July–October, 1889). Specimen in herb. Gray.

L. MACULATUM L. Escaped from cultivation; Medford (*W. J. Child*, May, 1886); Milton (*C. H. Morss*, Aug. 5, 1894).

LEONURUS.

L. CARDIACA L. Waste places, especially in rich soil, common.

LYCOPUS.

L. americanus Muhl. Low ground, common northward, but no reports from southern towns, except Cohasset.

L. EUROPAEUS L. Waste ground, Cambridge, Oct. 6, 1894 et seq. Specimens in herb. Gray and Wellesley College.

L. rubellus Moench. Low ground, frequent.

L. sessilifolius Gray. Gravelly shore of Monponsett Pond, Halifax (*Wm. Boott*, Sept. 23, 1870; *C. H. Knowlton & W. P. Rich*, Sept. 23, 1906).

L. uniflorus Michx. Swamps and wet places, common throughout.

L. virginicus L. Wet shores and swampy places, frequent.

MARRUBIUM.

M. VULGARE L. Waste land, occasional (13 stations).

MELISSA.

M. OFFICINALIS L. Escaped from cultivation at Georgetown, Newbury and Cambridge.

MENTHA.

M. arvensis L. Swamps and wet thickets, common, but not reported from southern towns.

M. arvensis L., var. **canadensis** (L.) Briquet. Frequent.

M. CARDIACA Gerarde. Roadsides and moist places at Chelmsford, Lincoln, Weston, Cambridge and West Roxbury.

M. GENTILIS L. Low ground; Lexington, Lincoln, Belmont, Brookline.

M. PIPERITA L. Brooks and moist places, common.

M. SPICATA L. Moist soil, frequent.

MONARDA.

M. CITRIODORA Cerv. Parker River mills, Georgetown (*Mrs. C. N. S. Horner*, no date). Specimen in herb. N. E. Botanical Club.

M. DIDYMA L. Introduced by roadsides and in open woods, rare.

M. FISTULOSA L. Rich woods and pastures and old places, occasional.

M. FISTULOSA, L., var. RUBRA Gray. Concord (*E. S. Hoar*, August, 1879); roadside, Wellesley (*F. W. Hunnewell*, July 16, 1896).

M. mollis L. Woods and open places at eight scattered stations.

M. PUNCTATA L. Parker River Mills, Newbury (*Mrs. C. N. S. Horner*, September, 1885). Specimen in herb. N. E. Botanical Club.

NEPETA.

N. CATARIA L. Pastures and waste ground, common throughout

N M. HEDERACEA (L.) Trevisan. Moist places, occasionally in woods, common.

N M. HEDERACEA (L.) Trevisan, var. PARVIFLORA (Benth.) Druce. In similar places at eight stations. See RHODORA, xxiii. 289, 1921.

OCIMUM.

O. BASILICUM L. Belmont (*Wm. Booth*, Aug. 21, 1866). Specimen in herb. N. E. Botanical Club. A garden annual introduced from India.

ORIGANUM.

O. VULGARE L. Georgetown (*Wm. Oakes*, no date); specimen in herb. Gray, Bos. Soc. Nat. Hist. and Peabody Acad. Sci. Also reported at Hingham by T. T. Bouvé.

O. MARJORANA L. S. Boston (*C. E. Perkins*, Aug. 12, 1878); specimen in herb. N. E. Botanical Club. Native in the Mediterranean countries.

PERILLA.

P. FRUTESCENS (L.) Britton, var. **crispa** (Bentham) Deane n. comb.[1] Waste place, Arlington (*M. L. Fernald*, Sept. 28, 1908). A native of China and Indo-China.

PHYSOSTEGIA.

P. VIRGINIANA (L.) Benth. Roadsides, occasional.

PRUNELLA.

P. VULGARIS L. See RHODORA, xv. 179–186, 1913. Fields and waste places, occasional.

P. VULGARIS L., forma ALBIFLORA (Bogenhard) Britton. (Vide supra.) Allendale woods, Brookline (*E. & C. E. Faxon*, Aug. 6, 1885).

[1] PERILLA FRUTESCENS (L.) Britton, var. **crispa** (Benth.) Deane n. comb.
Dentidia nankinensis Lour. Fl. Cochin. 369 (1790).
Perilla ocymoides β crispa Benth. in DC. Prod. xii. 164 (1848).
Perilla nankinensis Descne., Rey. Hort. ser. 4, i. 61 (1852).
Perilla ocymoides, var. *nankinensis* Voss in Vilmorin, Blumengärtnerei 846 (1896).
Perilla frutescens nankinensis Britton, Mem. Torr. Bot. Club v. 277 (1894).
The name *crispa* must be used for this variety because it is the earliest name in the varietal category applied to the plant.

P. VULGARIS L., var. **lanceolata** (Barton) Fernald. (Vide supra). Fields and moist places, common.

P. VULGARIS L., var. **lanceolata** (Barton) Fernald, forma **candida** Fernald. Open field, Acton (*W. Deane*, June 27, 1885).

P. VULGARIS L., var. **lanceolata** (Barton) Fernald, forma **iodocalyx** Fernald. Fields and moist places, common.

PYCNANTHEMUM.

P. clinopodioides T. & G. Near riverbank, Concord (*H. A. Purdie*, Aug. 26, 1886); specimen in herb. W. Deane; Blue Hill, Milton (*C. E. Faxon*, Aug. 11, 1884; Aug. 17, 1887); specimens in herb. Gray.

P. flexuosum (Walt.) BSP. Dry fields and pastures, well distributed throughout.

P. incanum (L.) Michx. Dry rocky woods, frequent in central towns; apparently rare in Essex Co. and the southern towns.

P. muticum (Michx.) Pers. Roadsides and fields in moist soil, common.

P. verticillatum (Michx.) Pers. Moist fields and open woods, rare; Andover, Billerica, Westford, Nagog Pond [Acton?], Sherborn.

P. virginianum (L.) Durand & Jackson. Fields and roadsides, frequent except in south shore towns.

SALVIA.

S. SCLAREA L. Rubbish heap, Cambridge (*W. Deane*, July 23, 1886); specimen in herb. W. Deane.

S. TILIAEFOLIA Vahl. Rubbish heap. Cambridge (*W. Deane*, Oct. 5, 1885; *M. L. Fernald*, Sept. 26, 1908; Aug. 28, 1913). A Mexican waif.

S. VERTICILLATA L. Field, Sharon (*Miss M. L. Loomis*, Aug. 24, 27, 1908); specimens in herb. Gray and N. E. Botanical Club. Native of Europe and Asia.

SATUREJA.

S. ACINOS (L.) Scheele. Boylston Terrace, W. Medford (*C. H. Morss*, June 21, 1898); specimen in herb. N. E. Botanical Club.

S. HORTENSIS L. Escaped from gardens, rare; Lowell, Charlestown, Boston, Milton.

S. vulgaris (L.) Fritsch. Dry fields and open woods, rare; at ten widely scattered stations.

SCUTELLARIA.

S. ALTISSIMA L. Naturalized at Arnold Arboretum, Boston, foot of Hemlock Hill (*A. Rehder*, Sept. 20, 1913); specimen in herb. N. E. Botanical Club.

S. epilobiifolia Hamilton. (*S. galericulata* of Gray's Manual, 7th ed. See RHODORA, xxiii. 85–6, 1921). Swamps and wet shores, rather common throughout.

S. lateriflora L. Swamps and wet woods, common throughout.

STACHYS.

S. ambigua (Gray) Britton. Moist soil, frequent in western towns also tidal bank of Merrimac River, Newburyport.

S. ARVENSIS L. Freight yard, Somerville (*A. S. Pease*, Oct. 20, 1903); spontaneous in garden, Dorchester (*W. Deane*, Oct. 24, 1884; *J. R. Churchill*, Oct. 18, 1885).

S. BETONICA Benth. One single root in a wood, Newton (*C. J. Sprague*, no date.) Specimen in herb. Bos. Soc. Nat. Hist.

S. hyssopifolia Michx. Salem (*Wm. Edwards*, no date); specimen in herb. Wellesley College. "Appeared mysteriously on the wall at Paradise, Salem, 1824 (Dr. Charles Pickering)," according to J. Robinson, Fl. Essex Co., 83, 1880. Wet shore, Bellingham (*E. & C. E. Faxon*, Aug. 24, 1894; *C. H. Knowlton & W. P. Rich*, Aug. 2, 1908).

S. palustris L. Moist fields, also borders of salt marsh, rare; Ipswich, Burlington, Woburn, Quincy.

S. palustris L., var. **homotricha** Fernald. Byfield [Newbury], Danvers, Reading.

S. tenuifolia Willd., var. **aspera** (Michx.) Fernald. Wet shores and moist places, frequent inland.

TEUCRIUM.

T. canadense L. Moist soil and waste places, rare.

T. canadense L., var. **littorale** (Bickn.) Fernald. Beaches and borders of salt marshes, all along the coast.

T. OCCIDENTALE Gray. Vacant lot, S. Boston (*C. H. Knowlton*, July 29, 1908).

T. occidentale Gray, var. **boreale** (Bickn.) Fernald. Rocky sea shores at Rowley, Gloucester and Rockport.

THYMUS.

T. OVATUS Mill. Escaped, Boxford (*Mrs. C. N. S. Horner*, no date). Specimen in herb. N. E. Botanical Club. A native of central Europe.

T. SERPYLLUM L. Dry fields and pastures, occasional.

T. VULGARIS L., var. VERTICILLATUS Willk. & Lge. Grassy bank, Wellesley (*K. M. Wiegand*, June 2, 1910). An Italian mountain plant, found also in Corsica.

TRICHOSTEMA.

T. dichotomum L. Dry fields and pastures in sandy soil, very common throughout. White-flowered forms from Revere and Newton.

C. H. KNOWLTON, WALTER DEANE } *Committee on Local Flora.*

THE ESTUARINE BIDENS OF THE MIRAMICHI.

M. L. FERNALD.

THE peculiar endemic or isolated members of the genus *Bidens* which have been discovered in the tidal reaches from Maryland northward to the estuary of the St. Lawrence have been discussed at various times in the pages of RHODORA and we have learned that every considerable estuary in this region is likely to harbor some interesting plant of the genus. It was therefore gratifying, upon stopping to spend the night at Newcastle, New Brunswick, during a return trip from the Gaspé Peninsula with Professor Arthur Stanley Pease, to have our twilight stroll above the city, along the tidal shore of the Miramichi, rewarded by the discovery of another of these colpophilous plants. The Miramichi plant stands exactly between *Bidens hyperborea*, var. *cathancensis* Fernald, RHODORA, xx. 149 (1918) of southern Maine and var. *gaspensis* Fernald, l. c. 150, of the Gaspé river-mouths. In its comparatively thin sharply toothed and acuminate leaves, attenuate foliaceous bracts and long awns the Miramichi plant is like the former, but in its conspicuously decumbent or arched-ascending branches, few-flowered heads with only 3–5 very long and mostly serrate bracts it suggests the latter. This plant on account of its habit may be called

Bidens hyperborea Greene, var. **arcuans**, n. var., caulibus 2–3 dm. altis ramosis, ramis imis decumbentibus vel arcuato-adscendentibus; foliis tenuibus attenuato-acuminatis argute serratis, primariis 0.6–1.3 dm. longis costa subtus prominente; bracteis involucri exterioribus 3–5 lineari-lanceolatis acutis plus minusve serratis 2–8 cm. longis; floribus 15–30; achaeniis exterioribus 5–5.6 mm. longis, interioribus 8.5–9.5 mm. longis 1.8–2.4 mm. latis aristis marginalibus 4–4.7 mm. longis.

Stems 2–3 dm. tall, branching; the lower branches decumbent or arcuate-ascending; leaves thin, attenuate-acuminate, coarsely sharp-serrate; the primary 0.6–1.3 dm. long, with the midrib prominent beneath; outer involucral bracts 3–5, linear-lanceolate, acute, more or less serrate, 2–8 cm. long: flowers 15–30: outer achenes 5–5.6 mm. long; the inner 8.5–9.5 mm. long, 1.8–2.5 mm. wide, with the marginal awns 4–4.7 mm. long.—New Brunswick: tidal mud of Miramichi River, Newcastle, July 30, 1922, *Fernald & Pease*, no. 25,321 (type in Gray Herb.).

Gray Herbarium

HABENARIA HYPERBOREA IN RHODE ISLAND.

Albert E. Lownes.

Habenaria hyperborea (L.) R. Br. is so distinctly a plant of northern distribution, that it was with considerable surprise that the present writer collected the species in the town of Lincoln, R. I., not five miles north of the city of Providence. With but two exceptions the data at the writer's command show no records for the plant in the three southern New England states east of the Connecticut River,—at Amherst, Mass. (Ames: Orchidaceae Fasc. IV, 86) and at Bolton, Conn. (Graves *et al*: Cat. of the Flowering Plants and Ferns of Conn. 130). Baldwin (Orchids of New England) lists it as occurring at Concord, Mass., but there appears to be no existing proof of its collection at that station. The present record seems, therefore, to extend the range of the species in New England far to the southeastward.

The station where *H. hyperborea* was collected attracted the writer's attention early in the year 1922 by the large number of orchids which were to be found in a very small compass. Within a radius of less than two hundred yards eleven other species were collected, several in abundance. The rarest of these (in this instance) was curiously *Cypripedium acaule*, there being but a single plant. *H. viridis* var. *bracteata*, *H. psycodes*, *Spiranthes cernua*, *S. gracilis*,

Corallorrhiza maculata, and *C. odontorhiza* were all found in quantity; and about twenty-five plants were discovered of each of the following: *Orchis spectabilis*, *Cypripedium pubescens*, and *Liparis Loeselii*.

Many other plants of interest were present, too, in greater or lesser abundance. Even to list them all would take far more space than the writer has at his disposal, but two or three should be placed on record:

Botrychium ramosum and *B. angustisegmentum* were both found, several plants of the former.

Cardamine parviflora was common in clefts of a limestone ledge.

Aralia hispida, common on rocky slopes.

Hepatica americana, which is now almost extinct in Rhode Island, was found in abundance.

Specimens of all the above except *Cypripedium pubescens* and the last two species are in the author's herbarium.

A NEW STATION FOR DAPHNE.

Harriet A. Nye.

While teaching in the town of Smithfield, in the southern part of Somerset County, last spring, my attention was attracted, early in April, by a shrub I had never before seen. It proved to be somewhat puzzling to analyze, since I knew nothing of its leaves or fruit, but its resemblance to Dirca, which I found the year previous, assisted me in identifying it as *Daphne Mezereum* L., a plant which has been previously reported from but one other station in Maine (see Rhodora, Vol. XV, page 203).

As it was obviously an introduced plant, I was at once interested to account for its presence here and surmised that it had become naturalized from plants originally set in a small cemetery on the hillside near by. Later investigation proved the surmise to have been correct. A Mr. Silas Hitchcock, whose death occurred in Massachusetts in 1867, was brought to this cemetery for burial and his widow planted this shrub upon his grave. It is now thoroughly established along the roadsides for some distance; I found one good clump of it about a third of a mile from the original plants, yet it can hardly be considered to have spread to such an extent as to become troublesome when it is remembered that it has been over fifty years since it was planted there.

The low-growing shrub is of neat growth, bearing before the leaves appear, very pretty and fragrant pink blossoms, the individual flowers somewhat resembling Lilacs, and remaining in perfection almost a month before fading. The foliage is also neat and in June and July the bright red berries ripen, making the plant very attractive both in flower and fruit. It seems to me strange that it is not more widely planted.

Fairfield Center, Maine.

Cladonia Beaumontii in Massachusetts.—It has been customary to regard *Cladonia Beaumontii* (Tuck.) Wainio (the *Cladonia Santensis* b *Beaumontii* of Tuckerman)[1] as purely southern in distribution. It is recorded in the "Synopsis" from but two States, Alabama and North Carolina and, while this range has been somewhat extended since the publication of that work, it has not heretofore been found, so far as appears, from north of the limits given.

The plant is however, more or less common though local in Wareham, Massachusetts, where it occurs usually on sandy loam, and occasionally on decaying and decayed wood, in dry, mixed, rather open woods. Although it has not been collected outside the limits of the township of Wareham there is little doubt that it is established elsewhere in the surrounding country, especially in the wooded region adjacent to the headwaters of Buzzards Bay, and it would not be surprising, in view of its occurrence so far out of its previously recorded range, to have it found in other northern localities, particularly along the coastal belt.

It was first collected by the writer in 1918 but it was not until some two years later, when specimens were communicated to Mr. G. K. Merrill, that its identity was established. Since then material has been sent to various American and European herbaria.

The collector not familiar with the species who might happen to meet with it should have no great difficulty in distinguishing it from any other Cladonia growing in this region. It appears to be singularly free from the polymorphism so often shown in Cladonia species. The fact that it does not develop cups (either open or closed) and also that the podetia are not club-shaped narrows the chances of confusion. It is perhaps somewhat similar in habit and construction

[1] A Synopsis of the North American Lichens. Part 1, p. 245.

to such species as *Cladonia uncialis, Cladonia sylvatica,* etc., but its tendency to retain or produce squamae will readily separate it from any of that group. It somewhat resembles *Cladonia turgida* in color and might also perhaps be referred carelessly to a form or phase of *Cladonia furcata.* Its more slender podetia and smaller squamules, to go no further, will separate it from the first, and its lighter color together with its more erect podetia and shorter, more truncate branches, from the last. In the event of doubt its behavior under the action of caustic potash is diagnostic, the chemical response (yellow) being immediate and pronounced. A sheet of representative Wareham material showing the primary thallus and fully developed plants in both sterile and fertile states has been deposited in the Cryptogamic Herbarium, Cambridge.—C. A. Robbins, Onset, Massachusetts.

Oenothera perennis L. var. **rectipilis** (Blake) comb. nov.

Oenothera pumila var. *rectipilis* Blake, Rhodora **19**: 110. 1917.

In his recent revision of *Kneiffia,* Pennell[1] has replaced the familiar name *Oenothera pumila* L. by the older *O. perennis* L., an equation already made in the Index Kewensis but overlooked in the preparation of all recent treatments of the northeastern flora. Dr. Pennell refers the variety above mentioned to the synonymy of *Kneiffia perennis* (L.) Pennell, and states that "the unusual state in which the pubescence is spreading may be considered a form." On the contrary, it seems to me to be altogether too striking and distinct a plant to be passed over without recognition in nomenclature. It apparently has, moreover, a definite if restricted range, being known only from the southern shore of the Baie des Chaleurs in New Brunswick and the vicinity of the Niagara River in Ontario and (?) New York.—S. F. Blake, Bureau of Plant Industry, Washington, D. C.

Another Orchid new to New England.—The publication by Mr. H. W. Child[2] of the discovery in Vermont by Cyrus Pringle Horsford of *Listera australis* indicates that there are still species of this much collected group to be sought in New England. It was therefore, particularly interesting, while recently inserting into the

[1] Child, Rhodora, xxiv. 187 (1922).
[2] Bull. Torrey Club **46**: 372. 1919.

organized collection of the New England Botanical Club the herbarium of the veteran New Bedford botanist, E. Williams Hervey, Esq., to find three beautiful sheets, collected by Mr. Hervey and correctly identified by him, of *Habenaria cristata* (Michx.) R. Br. This Fringed Orchid, with orange-yellow flowers, is a characteristic coastal plain species which is frequent in the Pine Barrens of New Jersey but north of there rare and local, and apparently unrecorded northeast of New Jersey. Mr. Hervey's collections come from Smith's Neck in South Dartmouth, Massachusetts, August 5, 1905 and August 1, 1908, and make a notable addition to the coastal plain flora which reaches Buzzard's Bay and adjacent sections of Bristol and Plymouth Counties but which has failed to extend east of Buzzard's Bay along Cape Cod: such plants as *Potamogeton pulcher* (Nashawena, *Faxon*), *Eleocharis tuberculosa* (Marion, Rochester, Plymouth, etc.), *Rynchospora inundata* (Plymouth), *Carex striata,* var. *brevis* (Wareham, *Kennedy;* Plymouth, *Fernald;* Plympton, *Sanford*); *Habenaria ciliaris* (Marion, *Hitchings*); *Desmodium sessilifolium* (Lakeville and Middleboro); *Myriophyllum scabratum* (Westport and Falmouth); *Hydrocotyle verticillata* (Falmouth, *Morong*); *Sabatia stellaris* (Dartmouth, *Hervey*); *Scutellaria integrifolia* (New Bedford, *Hervey:* Bridgewater, old specimen in Gray Herbarium) and *Eupatorium leucolepis* (Lakeville and Kingston). The presence of these and many other southern plants in the Buzzard's Bay and adjacent regions but not east of the western base of Cape Cod (though sometimes on Martha's Vineyard or Nantucket) suggests that intensive work in the region from western Plymouth to Little Compton will yield as notable discoveries as have recent explorations on Nantucket and Cape Cod.—M. L. Fernald, Gray Herbarium.

The date of the February issue (unpublished as this goes to press) will be announced later.